

Description

METHOD AND APPARATUS FOR DETERMINING PERSONAL QUALIFIED DIVIDEND INCOME AND GENERATING INFORMATION STATEMENTS THEREOF

BACKGROUND OF INVENTION

[0001] The Jobs and Growth Tax Relief Reconciliation Act of 2003 (P.L. 108-27, 117 Stat. 752) (JGTRRA) was enacted on May 28, 2003. Subject to certain limitations, the JGTRRA generally provides that a "dividend" paid to an individual shareholder from either a domestic corporation or a "qualified foreign corporation" on or after January 1, 2003 is subject to tax at the reduced rates applicable to certain capital gains. The new capital gains tax rates of either 15% or 5% (15% for shareholders in the top four federal tax brackets, and 5% for shareholders in the 10% and 15% brackets) are a substantial reduction from current rates. The JGTRRA is a complex piece of legislation and the fed-

eral government has produced a significant amount of explanatory materials to describe the application of the JGTRRA.

[0002] To comply with the JGTRRA, a new Form 1099-DIV was created. Instead of a single box 1 for ordinary dividends, the new Form 1099-DIV includes box 1a for reporting total ordinary dividends that are taxable and box 1b for reporting the portion of the amount in box 1a that may be eligible for the new 15% or 5% capital gains rate, also referred to as "qualified dividends" or "qualified dividend income" (QDI). To qualify for the 15% or 5% capital gains rates, the share of stock to which the dividend relates must be held for more than 60 days of the 121-period that begins 60 days before the "ex-dividend date". Thus, a "holding period" calculation must be performed as part of the QDI calculation. (The "ex-dividend date" is the first date on which a security is traded without entitling the buyer to receive dividend distributions previously declared. That is, the "ex-dividend date" is the date on which the seller, and not the buyer, of a stock will be entitled to a recently announced dividend.)

[0003] JGTRRA applies to individual shareholders whether they own shares of stock directly in a brokerage account or

whether they own shares of stock indirectly by virtue of owning shares in a mutual fund that holds securities.

Thus, each mutual fund must now calculate the percentage of its ordinary dividend income that is QDI. Some types of ordinary dividends that will not be QDI (and thus are not eligible for the reduced tax rates) include:

[0004] 1. Dividends earned on stock that was not owned for long enough to meet the holding period (e.g., short-term capital gain distributions).

[0005] 2. Interest from bonds and money market securities.

[0006] After a mutual fund determines the percentage, it will be used to calculate the QDI for each investor that is reported on the new Form 1099-DIV.

[0007] A mutual fund investor cannot automatically presume that the entire amount of QDI reported in box 1b of the Form 1099-DIV is entitled to the new 15% or 5% capital gains rate. This is because all of the dividend producing mutual fund shares owned by the individual investor may not have met the holding period requirement. That is, even though the mutual fund held the shares long enough so that the dividends are QDI with respect to the mutual fund, an investor may not have held their mutual fund shares for the required period of time such that the divi-

dends are QDI in the hands of the investor. Accordingly, each mutual fund investor has its own "personal qualified dividend income" (personal QDI) which will be an amount between \$0 (e.g., an investor who purchased all of their mutual fund shares within weeks of when dividends were declared) and the entire QDI (e.g., an investor who has not bought any new shares in the past year). The personal QDI is not reported on the Form 1099-DIV and there is no requirement for mutual funds to calculate what the personal QDI should be for a specific investor. It is estimated that a significant percentage of accounts managed by a mutual fund investment provider (perhaps 8-15% will have a personal QDI each year that differs from the fund QDI.

[0008]

SUMMARY OF INVENTION

[0009] Personal qualified dividend income (QDI) is calculated for one or more investors for mutual fund dividend distributions made to accounts of the investors from one or more mutual funds. A first database stores account transaction history data of the investors for each of the mutual funds. A second database stores dividend distribution information for each of the mutual funds and information indicat-

ing what percentage of dividend distributions of each of the mutual funds are QDI. A QDI calculation engine receives and processes the account transaction history data, the dividend distribution information, and the percentage of mutual fund dividend distributions that are QDI from the first and second databases to automatically determine the personal QDI for a selected time frame for one or more of the investors. The account transaction history data is used to provide transaction data for a specific investor and to determine whether holding period requirements are met for a specific investor. Personal QDI information, such as personal QDI statements, may be automatically generated and provided to investors. A similar process may be performed for brokerage accounts that hold individual stocks.

BRIEF DESCRIPTION OF DRAWINGS

[0010] The foregoing summary, as well as the following detailed description of preferred embodiments of the invention, will be better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, there is shown in the drawings embodiments which are presently preferred. However, the invention is not limited to the precise arrangements and instrumental-

ities shown.

[0011] In the drawings:

[0012] Figure 1 is a schematic block diagram of a personal QDI calculation system in accordance with one preferred embodiment of the present invention;

[0013] Figures 2–4 are more detailed views of the contents of databases in Figure 1;

[0014] Figure 5 is a flowchart of a process for generating personal QDI statements to selected mutual fund investors;

[0015] Figure 6 is a sample QDI statement;

[0016] Figure 7, Figures 8A–8H and Figures 9A–9C, taken in combination, illustrate one preferred process for performing a personal QDI calculation based on transaction data of an investor; and

[0017] Figures 10–14 are screen shot displays of a user interface that an investor interacts with to obtain a personal QDI from an investment provider.

DETAILED DESCRIPTION

[0018] Certain terminology is used herein for convenience only and is not to be taken as a limitation on the present invention. In the drawings, the same reference letters are employed for designating the same elements throughout

the several figures.

[0019] I. OVERVIEW OF PRESENT INVENTION

[0020] Figure 1 is a schematic block diagram of one preferred embodiment of the present invention. This embodiment is described with respect to a process developed by The Vanguard Group, a mutual fund and investment service provider, for interactive use by investors on the Vanguard web site (www.vanguard.com), as well as for internal use by Vanguard in servicing its clients. However, the scope of the present invention is not limited to such uses and may be used by any investment entity in servicing its clients.

[0021] Figure 1 shows a system 10 which includes first database 12, a second database 14 and a third database 16, each of which provide information to a personal QDI calculation engine 18. The first database 12 stores account transaction history data of investors for one or more mutual funds 20. The second database 14 stores dividend distribution information for each of the mutual funds 20 and information indicating what percentage of dividend distributions of each of the mutual funds are QDI. The third database 16 stores account type information of the investors for each of the mutual funds. A more detailed view of the contents of the first database 12, the second

database 14 and the third database 16 is provided in Figures 2–4. The personal QDI calculation engine 18 receives and processes the account transaction history data, the dividend distribution information, and the percentage of mutual fund dividend distributions that are QDI from the first and second databases 12 and 14 to automatically determine the personal QDI for a selected time frame for one or more of the investors. The account transaction history data is used to provide transaction data for a specific investor and to determine whether holding period requirements are met for a specific investor. Certain types of accounts such as retirement accounts and other non-taxable accounts, short-term money market accounts, bond fund accounts, corporate accounts, and accounts where the primary owner is a non-resident alien, are not eligible for QDI, and thus no personal QDI calculation would need to be performed on such accounts. The account type information stored in the third database 16 is used to inform an investor of the types of accounts that are eligible for QDI (and thus available for calculation of a personal QDI). If the system 10 is used internally to generate personal QDI statements, then the account type information is used to identify the investor accounts that

need such statements.

[0022] The system 10 can be used directly by an investor 22 or internally by an investment provider (investment management company) who manages one or more mutual funds (e.g., The Vanguard Group). If used by an investor, the system 10 includes a front end (investment provider interface) 24 in communication at one end with the personal QDI calculation engine 18 and in communication at the other end with computer terminals 26 (user interfaces) via communication medium 28. The communication medium 28 may be a wired or wireless communication medium (e.g., phone, cable, satellite). The computer terminals 26 may be located anywhere in the world. Some computer terminals 26 may also be personal computers or other forms of user interfaces, such as a telephone. In one preferred embodiment of the present invention, the computer terminals 26 are personal computers and include web browsers for connecting to the front end 24 via the Internet. For example, the existing Vanguard web site can include additional functionality to allow a user to enter a time frame (e.g., previous calendar year, previous calendar quarter(s)) and the accounts for which a personal QDI is desired and receive a personal QDI statement, either im-

mediately during the session or at a later point in time. One embodiment of this process is shown in Figures 10–14 described below. The web site tool is particularly helpful to investors who must file quarterly estimated returns and investors who file their income tax returns prior to a mailing of personal QDI statements.

[0023] When the system 10 is used internally by an investment provider, a customer service representative 30 interfaces directly with the personal QDI calculation engine 18 via a terminal 32 and/or accesses a fourth database 34 to view electronic versions of personal QDI statements which may have been previously automatically generated and stored, and mailed to investors. In this manner, the customer service representative 30 can assist an investor in many different ways, by either fielding questions from investors about previously mailed or emailed personal QDI statements or generating a personal QDI statement while speaking to an investor.

[0024] The ineligibility of retirement, corporate and other non-taxable accounts is based on the account type which is determined from the third database 16. However, the ineligibility of short-term money market and bond fund investments is based on the fund type, which is determined

from the second database 14. First, the account type is checked, and then, if it is eligible for QDI, an attempt is made to compute personal QDI for each fund in that account. Since short-term money market and bond funds are not eligible for QDI, appropriate content is provided to the computer terminals 26 for these funds, such as a message informing the investor 22 that QDI is not applicable to those funds.

[0025] The first database 12, second database 14 and third database 16 are shown in Figure 1 as separate databases. However, any combination of these databases may physically be subparts of a single database. Also, any of these databases may reside at physically different locations. For example, account transaction history data may be kept in records of an independent third party custodian (record keeper) that services mutual funds. Furthermore, portions of each of the databases may be at physically different locations and may be maintained by physically different entities, especially if personal QDI calculations are to be performed on mutual fund accounts of other investment providers or brokerage accounts containing individual stocks or mutual fund accounts of other investment providers. In each of these scenarios, the contents of any

of the three databases may be kept outside of the investment provider that is offering the personal QDI calculation process. In one embodiment of the present invention, such contents are obtained from one or more independent third party custodians.

[0026] Figure 2 shows additional self-explanatory details of the contents of the first database 12 for a single mutual fund 20. Figure 3 shows additional self-explanatory details of the contents of the third database 16 for a single mutual fund 20. In the example of Figure 3, only the Jones account 3983 and the Harris account 4567 potentially have QDI. Figure 4 shows additional details of the second database 14. Each mutual fund 20 will likely have a different percentage value, and the percentage values for each year or quarter of a single mutual fund will also likely be different. The second database 14 also includes dividend distribution frequency and dividend amount per share information (not shown in Figure 4).

[0027] Figure 5 is a flowchart of a process for generating personal qualified dividend income (QDI) statements to selected mutual fund investors. Each investor has one or more accounts in one or more mutual funds that declare dividend distributions. The steps of the method are as

follows:

- [0028] 1. Identify mutual fund investors who are recipients of a Form 1099-DIV for at least one mutual fund. As discussed above, the Form 1099-DIV includes the QDI for each of the mutual funds that are eligible for QDI.
- [0029] 2. Perform a personal QDI calculation for each of the recipients.
- [0030] 3. Compare the personal QDI and the QDI on the Form 1099-DIV.
- [0031] 4. Generate a personal QDI statement for only the mutual fund investors that have personal QDI that is less than the QDI on the Form 1099-DIV, provide the statement to the investor, and save an electronic version. This step minimizes the amount of paperwork that is generated by the mutual fund and forwarded to investors. Preferably, this process is performed automatically each year (such as in March) and the personal QDI statements are provided to the investors to assist the investors in preparing income tax returns for the previous year.
- [0032] Figure 6 shows a sample personal QDI statement generated by the process described in Figure 5. An electronic image of the personal QDI statements or the data elements necessary to reconstruct the statements are prefer-

ably stored by the investment provider in the fourth database 34 as described above for subsequent retrieval by a customer service representative, if necessary.

[0033] There are many different methods of calculating the personal QDI that likely comply with the JGTRRA and the corresponding guidelines issued by the federal government. One specific methodology is described below. This methodology uses a first in first out (FIFO) redemption methodology to make the holding period determination. However, the scope of the present invention includes accounting methods other than FIFO for holding period calculations (e.g., specific lots), and any other methodologies that calculate the personal QDI in a manner that complies with the JGTRRA.

[0034] The process described above for mutual fund investors is equally applicable to brokerage accounts. Brokerage accounts include shares of individual stocks (i.e., stock holdings). A brokerage account may also hold mutual fund shares that are for funds outside of the investment provider (investment management company) that is providing the personal QDI calculation service. If so, then the personal QDI calculation engine 18 must retrieve the appropriate information for that mutual fund from the

databases that contain the information. Additional considerations for performing personal QDI calculations on brokerage accounts are described below.

[0035] **II. DETAILED DISCLOSURE**

[0036] One implementation of the present invention is described below.

[0037] **A. Software/database details**

[0038] First, second and third databases 12, 14, 16: IBM DB2 database software

[0039] Personal QDI calculation engine:

[0040] i. Java user interface

[0041] ii. DB2 and COBOL used for the web site and internal process

[0042] iii. mid-tier server –UNIX box

[0043] iv. web site personal QDI calculation programmed in Java

[0044] v. internal calculation of personal QDI programmed in COBOL

[0045] **B. Detailed flowchart of personal QDI calculation process**

[0046] **Input Parameters (from web site interface)**

[0047] i. User selects one Vanguard Mutual Fund Account.

[0048] ii. Only accounts that receive a Form 1099-DIV are eligible for the calculation.

[0049] iii. User specifies time frame for calculator:

[0050] a. Previous Tax Year – Used for tax return preparation.

[0051] b. Previous or Current Tax Year Estimates – Used for quarterly estimates.

[0052] JGTRRA Holding Period:

[0053] |_____|
_____ | Ex-Div – 60 calendar days Ex-Dividend
Date Ex-Div + 60 calendar days

[0054] Process steps for mutual fund accounts

[0055] 1. Personal QDI will be calculated for each holding (fund) in the selected account by examining each fund's dividend distribution within the specified timeframe.

[0056] 2. Retrieve the fund's dividend distribution frequency (Record Date(s) and Ex-Dividend date(s)), dividend amounts per share and estimated or actual QDI percentages.

[0057] 3. Determine if the fund declared a dividend during the specified time period.

[0058] 4. Determine if the fund is eligible for QDI.

[0059] 5. Proceed to next holding if no dividends were declared during specified timeframe or if the fund is not eligible for QDI.

[0060] 6. Determine if the holding received the dividend by calculating the amount of shares owned on Record Date. (Due to the potential for dividend adjustments, this approach was chosen over obtaining the dividend transaction(s) from transaction history. However, either approach may be used.)

[0061] 7. If the holding received the dividend, determine what portion meets the holding period requirement.

[0062] 8. The calculator assumes shares are redeemed using First In First Out (FIFO) method.

[0063] For this calculator, a redemption is defined as a transaction that debits the share balance, with the exception of conversions among share classes of that fund.

[0064] i. Conversions of one share class to another will not be considered a redemption of the same fund.

[0065] ii. A net transfer of shares out of a holding is considered a redemption.

[0066] iii. In the event of a transaction reversal, the original and subsequent transactions are ignored.

[0067] 9. If no shares were redeemed during the holding period,

the entire dividend amount meets the holding period requirement.

[0068] 10. Determine the amount of shares owned at the beginning of the holding period.

[0069] 11. Determine the amount of shares redeemed during the holding period.

[0070] 12. If the amount of shares redeemed during the holding period is less than or equal to the amount of shares owned at the beginning of the holding period, the entire dividend amount meets the holding period requirement. Otherwise, the tool will compute the number of shares meeting the holding period requirement and determine the appropriate dividend amount.

[0071] 13. Determine the amount of shares that meet the holding period requirement on Ex-Dividend date by subtracting the amount of shares redeemed between the beginning of the holding period and the Ex-Dividend date from the amount of shares owned at the beginning of the holding period.

[0072] 14. Retain this share amount as the "interim QDI share amount" for later use by the calculator. (Set to zero if negative.)

[0073] 15. Add the amount of shares purchased between the be-

ginning of the holding period and the Ex-Dividend date minus 2 calendar days.

- [0074] a. For this calculator, a purchase is defined as a transaction that credits the share balance, with the exception of conversions from one share class of a mutual fund to another share class of that same mutual fund.
- [0075] i. These types of conversions into a holding will not be considered a purchase. The holding period for such conversions will be determined by reference to the holding period of any of the share classes for the mutual fund.
- [0076] ii. A net transfer of shares into a holding is considered a purchase.
- [0077] iii. In the event of a transaction reversal, the original and subsequent transactions are ignored.
- [0078] 16. Subtract the amount of shares redeemed between the Ex-Dividend Date and the end of the holding period.
- [0079] 17. Add the remaining shares to the "interim QDI share amount" to determine the number of shares to meet the holding period requirement for the dividend distribution.
- [0080] 18. Multiply the applicable shares by the dividend amount per share to determine the dividend amount meeting the holding period requirement for the dividend distribution.
- [0081] 19. Once the dividend amount meeting the holding period

requirement for each dividend distribution period within the specified timeframe has been calculated, sum the amounts.

[0082] 20. Multiply the sum of all dividends meeting the holding period requirement for the specified time frame (calculated in step 19) by the fund's QDI to determine the amount of personal QDI for the holding.

[0083] a. For Previous Tax Year timeframe, multiply by the fund's actual QDI percentage of Dividend Income and add the "qualified" Short Term Capital Gain Amount (short term capital gains amount distributed for the holding for the previous tax year multiplied by the fund's actual QDI percentage of Short Term Capital Gain).

[0084] b. For Previous or Current Tax Year timeframes, multiply by the fund's estimated QDI percentage of Dividend Income.

[0085] 21. Once the personal QDI amount has been calculated for each holding in the selected account, provide the results to the User: (Current Date; Timeframe for the personal QDI calculation; Account Name for the selected Account; for each holding within the Account: Holding Name; Fund/Account Number; an indication that the holding was not eligible for QDI.)

- [0086] a. Display the following data when calculating Personal QDI for Previous Tax Year: (Total Ordinary Dividends reported as box 1a on the 1099-DIV; QDI reported as box 1b on the 1099-DIV; Personal QDI Amount)
- [0087] b. Display the following data when calculating Personal QDI for Previous or Current Tax Year Estimates: (Dividend Income Paid during Specified Timeframe; Personal QDI Amount; "As-Of Date" [Month and Year] for Fund's estimated QDI percentage of Dividend Income)
- [0088] Modifications of process steps for brokerage accounts which hold individual securities and non-Vanguard mutual funds:
- [0089] 1. Since estimated QDI will not be available for all impacted equities and nonfunds, QDI for brokerage accounts could only be calculated for the Previous Tax Year. To provide a calculation for current tax year tax estimates for brokerage accounts, QDI estimates for all underlying securities will be required.
- [0090] 2. Additional data (security/fund level and holding level) is required from the record keeper (which is Pershing for Vanguard Brokerage Accounts). The dividend distribution of each security must be examined within the specified time frame.

[0091] 3. Calculator must be enhanced to incorporate 180 day holding period for certain preferred securities.

[0092] 4. Calculator must be enhanced to accommodate Brokerage specific transactions—stock splits, mergers, etc.

[0093] 5. The accounting method (e.g., FIFO, specific lot, LIFO) is preferably selectable by the investors.

[0094] C. Example of a personal QDI calculation for a mutual fund investor.

[0095] Figure 7, Figures 8A–8G and Figures 9A–9C, taken in combination, illustrate one preferred process for performing a personal QDI calculation for 2003 based on transaction data of an investor.

[0096] Figure 7 shows the transaction history and how holding periods are identified.

[0097] Figures 8A–8G, taken together, show an actual QDI calculation and the underlying templates and calculations. Figures 8B–8E show a manual calculation template, Figure 8F shows data calculation clarifications, and Figure 8G shows detailed calculations. The resultant total personal QDI dollar amount for the fund for tax year 2003 (shown in the lower right-hand corner of Figure 6) must be multiplied by the fund's actual QDI percentage for Dividend Income and added to the "qualified" Short Term Capital

(Short Term Capital Gain for the holding X fund's QDI% for Short Term Capital Gain).

[0098] Figures 9A–9C show templates used for performing the personal QDI calculation. The first template in Figure 9A calculates the QDI Share Amount for the holding period of a Dividend Distribution. Additional templates in Figure 9B calculate Personal QDI for the specified time period after the QDI Amount for each Dividend Distribution is calculated separately. The template instructions are as follows:

[0099] 1. Enter the Ex–Dividend Date for the Dividend Distribution Period. All other dates will be calculated.

[0100] 2. Enter the share amounts highlighted with an asterisk. All other amounts will be calculated.

[0101] 3. Enter the fund's dividend amount per share in dollars. The QDI Amount for the Dividend Distribution period will be calculated.

[0102] 4. Enter the QDI Amount for the Dividend Distribution period in the template provided to sum the amounts for the specified time period.

[0103] 5. Enter the amount of shares owned on Record Date and the Dividend Amount per share in dollars in the template provided to sum the amounts for the specified time period. The Dividend Distribution Amount for the specified

time period will be calculated. For Previous and Current Year Estimates, this will be displayed as "Dividends Paid to date" on the Results Page. For Previous Tax Year Actuals, this amount will be needed to calculate "qualified" Foreign Taxes Paid.

- [0104] 6. Repeat steps 1–5 for each Dividend Distribution Period within the Calculation time period.
- [0105] 7. For Previous Tax Year Actuals Only: (Skip to step 8 For Estimates)
 - [0106] a. Apply Tax Exempt % for Tax Managed Balanced fund (VAST fund #103)– see Figure 9C.
 - [0107] b. Complete "Qualified" Foreign Taxes Paid Calculation using separate template. Enter the amounts highlighted with a double asterisk, the rest will be calculated.
 - [0108] c. Add "Qualified" Foreign Taxes Paid Amount from "Qualified" Foreign Taxes Paid Template to Sum of each QDI Dividend Amounts on Time Period totals template.
- [0109] 8. Enter the fund's actual or estimated QDI percentage of Dividend Income on the Time Period Totals Template. This will be multiplied by the Sum of QDI Dividend Amounts (with or without "Qualified Foreign Taxes Paid Amount").
- [0110] 9. For Previous Tax Year Actuals, enter the fund's QDI percentage of Short Term Gain. The Prior Year Short Term

Gain Amount multiplied by the fund's QDI percentage of Short Term Gain will be added to the Qualified Dividend Income Amount to yield the final result.

- [0111] D. Display screens for investor using holding period calculator
- [0112] Figures 10–14 are screen shot displays of a user interface that an investor interacts with to obtain a personal QDI from an investment provider.
- [0113] Figure 10 – Investor accepts terms and conditions.
- [0114] Figure 11– Investor selects account(s) on which the calculation is to be performed.
- [0115] Figure 12 – Investor selects time frame. In one alternative embodiment, there is a default time frame which the user must deselect if a different time frame is desired. In yet another alternative embodiment, the default time frame is nonselectable (e.g., only the previous year time frame can be calculated).
- [0116] Figure 13 – Results of personal QDI calculation are shown (in this example, the investor selected calculation for prior year's income).
- [0117] Figure 14 – Results of personal QDI calculation are shown (in this example, the investor selected calculation of estimate for current year).

[0118] In one implementation of this user interface, the results shown in Figures 13 and 14 are not stored by the investment provider.

[0119] The investors referred to herein are either the owners of the accounts, the beneficial owners of the accounts (e.g., the beneficiaries of a trust, a minor, or an incapacitated person), or those persons authorized to act on the accounts (e.g., trustees, guardians, custodians, general partners, members, or holders of a power of attorney). Accordingly, the scope of the present invention includes investors who are the owner or beneficial owners of the accounts, as well as those who are not the beneficial owners of the accounts.

[0120] In the preferred embodiment of the present invention, the personal QDI information is presented in the form of a personal QDI statement. However, the personal QDI information may be presented in any manner, and the scope of the present invention includes presentation methods other than formal personal QDI statements.

[0121] The present invention may be implemented with any combination of hardware and software. If implemented as a computer-implemented apparatus, the present invention is implemented using means for performing all of the

steps and functions described above.

[0122] The present invention can be included in an article of manufacture (e.g., one or more computer program products) having, for instance, computer useable media. The media has embodied therein, for instance, computer readable program code means for providing and facilitating the mechanisms of the present invention. The article of manufacture can be included as part of a computer system or sold separately.

[0123] It will be appreciated by those skilled in the art that changes could be made to the embodiments described above without departing from the broad inventive concept thereof. It is understood, therefore, that this invention is not limited to the particular embodiments disclosed, but it is intended to cover modifications within the spirit and scope of the present invention.